

Material Safety Data Sheet

according Directive 91/155 EEC

Important: Read this MSDS before handling and disposing of this product and pass this information on to employees, customers and users of this product.

1. Identification of the substance/preparation and company

- 1.1. **Product Name:** ResiCem (paste)
- 1.2. **Company:**
Shofu Dental GmbH
Am Brüll 17
D-40878 Ratingen
Phone No. +49(0)2102/8664-0 Fax-No. +49(0)2102/8664-64
- 1.3. **Emergency Phone No.**
+49(0)2102/8664-20

2. Composition/information on ingredients

Compositions given are typical values, not specifications.

2.1. Ingredients	<i>A paste</i>	<i>B paste</i>	Symbol	risk-phrases	CAS-No.
UDMA					72869-86-4
Triethylenglycol dimethacrylate					109-16-0
2-Hydroxyethyl methacrylate	≐ 1 %	≐ 5 %	Xi	irritant	[868-77-9]
Glass Filler (Fluoro-alumino-silicate glass)					65997-18-4
Acryl adhesive monomer	N/A				
Amorphous fumed silica					7631-86-9
DL-Camphorquinone	N/A				10373-78-1
Others					

Hazardous ingredients are not included

3. Hazard identification

- 3.1. **For the user:** Contact may cause irritation to skin and eyes
- 3.2. **Environmental hazard:**

4. First aid measures

- 4.1. **Inhalation:**
- 4.2. **Skin contact:** Wash immediately with plenty of water and mild soap
- 4.3. **Eye contact:** Flash with flowing water and consult physician if necessary
- 4.4. **Ingestion:** Consult physician if necessary

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5. Fire-fighting measures

- 5.1. **Extinguisher method:** foam, CO₂, dry chemical
- 5.2. **Not useful method:**
- 5.3. **Special exposure hazards arising:** In case of fire, do not breath fumes and gases (Irritating gases and fumes may emit)
- 5.4. **Special equipment for fire-fighting:** Wear fire protective cloth and self-contained breathing apparatus if necessary

6. Accidental release measures

- 6.1. **Personal precautions:** Avoid contact with eyes and skin
- 6.2. **Environmental precautions:** Dispose according to local, state, and federal regulations
- 6.3. **Methods for cleaning up** Wipe up and discard in a suitable container

7. Handling and storage

- 7.1. **Handling:** Avoid inhalation of grindings and prolonged skin and eyes contact with uncured resin
- 7.1.1. **Precautions for safe handling:**
- 7.2. **Storage:** Store in a cool and dark area (Keep refrigerated when not in use)
- 7.2.1. **Precautions for storage rooms:**
- 7.2.2. **Storage of incompatible materials:**
- 7.2.3. **Special storage conditions:** Do not expose to sunlight or heat

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8. Exposure controls/personal protection

8.1.	Exposure controls:	ACGIH TLV. None assigned
8.1.1.	MAK:	
8.2.	Respiratory protection:	Not required (use dust mask while grinding or finishing)
8.3.	Hand protection:	Protective gloves (latex or rubber)
8.4.	Eye protection:	Safety goggles (may be required)
8.5.	Skin protection:	Not required

9. Physical and chemical properties:

9.1.	Appearance	paste	Colour	colored	Odour:	sweet
9.2.	PH:					
9.3.	Boiling point:		N/A			
9.4.	Melting point		N/D			
9.5.	Flash point		N/A			
9.6.	Explosion limits:		Lower:		Upper:	
9.7.	Relative density:		1.8		(water=1)	
9.8.	Vapour density:					
9.9.	Solubility:		water solubility: insoluble			
9.10.	Viscosity:					
9.11.	Others:					

10. Stability and reactivity:

10.1.	Conditions to avoid:	Visible light and high temperature
10.2.	Materials to avoid:	Strong oxidizing materials
10.3.	Hazardous decomposition products:	Will not occur
10.4..	Others:	

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11. Toxicological information:

11.1. Acute Toxicity:	LD50= Rodent-rat (oral)	5050mg/kg (as 2-HEMA)
	LD50= Rodent-rat (intraperiton)	1250mg/kg (as 2-HEMA)
	LD50= Rodent-mouse (oral)	3275mg/kg (as 2-HEMA)
11.1.1. Ingestion:		
11.1.2. Inhalation:		
11.1.3. Skin contact:		
11.1.4. Eye contact:		
11.2. Chronic effects:		
11.2.1.		
11.2.2.		
11.2.3.		
11.2.4.		
11.2.5.		

12. Ecological information:

13. Disposal conditions:

13.1. Material:	Dispose in accordance with local, state and federal regulations
13.2. Packaging:	

14. Transport information:

N/A

15. Regulatory information:

16. Other information:

Handling of product exclusively by dental specialists according to instructions for use

N/D: No data

N/A: Not applicable

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Some of the information presented and conclusions drawn herein are from sources other than direct test-data on the product itself.

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Disclaimer of Liability

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.

The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge.

For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

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1. Identification of the substance/preparation and company

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- 1.2. **Company:**
Shofu Dental GmbH
Am Brüll 17
D-40878 Ratingen
Phone No. +49 (0)2102/8664-0 Fax-No. +49 (0)2102/8664-64
info@shofu.de
- 1.3. **Emergency Phone No.**
+49 (0)2102/8664-25

2. Composition/information on ingredients

Compositions given are typical values, not specifications.

2.1. Ingredients	Einecs no.	% weight	Symbol	risk-phrases	CAS-No.
Acetone		≐ 10	F	flammable	67-64-1
Pure water					
Others					

3. Hazard identification

- 3.1. **For the user:** Eye contact may occur irritation or possible corneal damage
Possible nausea on prolonged exposure
- 3.2. **Environmental hazard:** and/or dizziness
- 3.4. **Hazard Designation:** Highly flammable Liquid Symbol is **F**

4. First aid measures

- 4.1. **Inhalation:** Move to the open air
- 4.2. **Skin contact:** Wash immediately with soap and plenty of water
- 4.3. **Eye contact:** Flash with flowing water and consult physician
- 4.4. **Ingestion:** Consult physician

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5. Fire-fighting measures

- 5.1. **Extinguisher method:** foam, CO₂, dry chemical, water
- 5.2. **Not useful method:**
- 5.3. **Special Exposure Hazards Arising:** Easily flammable liquid in room temperature
- 5.4. **Special equipment for fire-fighting:** Wear fire protective cloth and self-contained breathing apparatus if necessary

6. Accidental release measures

- 6.1. **Personal precautions:** Avoid eye and skin contact -see section 8-
Do not inhale vapor
- 6.2. **Environmental precautions:** Dispose according to local, state and federal regulations
- 6.3. **Methods for cleaning up** Wipe up and discard in a suitable container
(leak-proof and gastight)

7. Handling and storage

- 7.1. **Handling:** Handle in a well ventilated place, keep away from
naked flames, sparks and sources of heat, do not smoke. Wear protective gloves, safty spectacles or face shield
- 7.1.1. **Precautions for safe handling:**
- 7.2. **Storage:** Store in a cool and dark fire proof area with container
tightly closed. Separate from strong oxidants
- 7.2.1. **Precautions for storage rooms:** Keep refrigerated when not in use
- 7.2.2. **Storage of incompatible materials:**
- 7.2.3. **Special storage conditions:** Do not expose to sunlight or heat
No smoking area

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8. Exposure controls/personal protection

8.1. Exposure controls:

8.1.1. ACGIH TLV Acetone[Cas No. 67-64-1] 1780 mg/m³

8.2. Respiratory protection: Not required (use protective gas mask for organic gases, if necessary)

8.3. Hand protection: Protective gloves (latex or rubber)

8.4. Eye protection: Safety goggles (may be required)

8.5. Skin protection: not required (general working clothes)

9. Physical and chemical properties:

9.1. Appearance Liquid Colour colorless Odour: sweet

9.2. PH:

9.3. Boiling point: N/D

9.4. Melting point N/A

9.5. Flash point 13°C (close)

9.6. Explosion limits: Lower: Upper:

9.7. Relative density: 1.01 (water =1)

9.8. Vapour density:

9.9. Solubility: soluble in all purport

9.10. Viscosity:

9.11. Others:

10. Stability and reactivity:

10.1. Conditions to avoid: Visible light on the liquid, keep away from source of ignition (electric discharge and smoking etc.)

10.2. Materials to avoid: Strong oxidizing materials

10.3. Hazardous decomposition products: may occur peroxide

10.4.. Others:

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11. Toxicological information:

11.1. Acute Toxicity:

11.1.1. Ingestion:

11.1.2. Inhalation:

11.1.3. Skin contact:

11.1.4. Eye contact:

Of the vapour may cause headache, dizziness and vomiting

Repeated contact to the mucous membrane of eyes, nose and throat cause inflammation

11.2. Chronic effects:

11.2.1.

11.2.2.

11.2.3.

11.2.4.

11.2.5.

12. Ecological information:

Don't discard into the drain

13. Disposal considerations:

13.1. Material:

Disposal in accordance with federal, state and local regulations

13.2. Packaging:

14. Transport information:

UN hazard Class 3
Pack group II EN 1090 (as Acetone)

15. Regulatory information:

16. Other information:

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according to instructions for use

N/D: No data

N/A: Not applicable

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- 1.2. **Company:**
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40878 Ratingen
Phone No. +49 (0)2102/8664-0 Fax-Nr +49 (0)2102/8664-64
info@shofu.de
- 1.3. **Emergency Phone No.**
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2. Composition/information on ingredients

Compositions given are typical values, not specifications

2.1. Ingredients	Einecs nc % weight	Symbol	risk-phrases	CAS-No.
2-Hydroxy Ethyl Methacrylate	≐40%	XI	irritant	868-77-9
Acetone	≤20%	F	flammable	67-64-1
Acrylic adhesive monomer				
Others				

3. Hazard identification

- 3.1. **For the user:** Irritating to eyes and skin
Possible nausea on prolonged exposure
- 3.2. **Environmental hazard:** Inhalation may occur sore throat, cough, confusion, headache and/or dizziness
- 3.4. **Hazard Designation:** Flammable and irritant preparation. Symbols are **F** and **Xi**

4. First aid measures

- 4.1. **Inhalation:** Move to the open air
- 4.2. **Skin contact:** Wash immediately with soap and plenty of water
- 4.3. **Eye contact:** Flush with flowing water and consult physician
- 4.4. **Ingestion:** Consult physician

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5. Fire-fighting measures

- 5.1. **Extinguisher method:** foam, CO₂, dry chemical, water
- 5.2. **Not useful method:**
- 5.3. **Special Exposure Hazards Arising:** Easily flammable liquid in room temperature
Irritation gases and fumes may emit
- 5.4. **Special equipment for fire-fighting:** Wear fire protective cloth and self-contained breathing apparatus if necessary

6. Accidental release measures

- 6.1. **Personal precautions:** Avoid eye and skin contact -see section 8-
Do not inhale vapor
- 6.2. **Environmental precautions:** Dispose according to local, state and federal regulations
- 6.3. **Methods for cleaning up** Wipe up and discard in a suitable container
(leak-proof and gastight)

7. Handling and storage

- 7.1. **Handling:** Handle in a well ventilated place, keep away from naked flames, sparks and sources of heat, do not smoke. Wear protective gloves, safety spectacles or face shield
- 7.1.1. **Precautions for safe handling:**
- 7.2. **Storage:** Store in a cool and dark fire proof area with container tightly closed. Separate from strong oxidants
- 7.2.1. **Precautions for storage rooms:** Keep refrigerated when not in use
- 7.2.2. **Storage of incompatible materials:**
- 7.2.3. **Special storage conditions:** Do not expose to sunlight or heat
No smoking area

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8. Exposure controls/personal protection

8.1. Exposure controls:

8.1.1. **ACGIH TLV** Acetone[Cas No. 67-64-1] 1780 mg/m³
2HEMA [Cas no.868-77-9] None assigned

8.2. **Respiratory protection:** Not required (use protective gas mask for organic gases, if necessary)

8.3. **Hand protection:** Protective gloves (latex or rubber)

8.4. **Eye protection:** Safety goggles (may be required)

8.5. **Skin protection:** not required (general working clothes)

9. Physical and chemical properties:

9.1. **Appearance** Liquid **Colour** colorless **Odour:** sweet

9.2. **PH:**

9.3. **Boiling point:** N/D

9.4. **Melting point** N/A

9.5. **Flash point** -12°C (close)

9.6. **Explosion limits:** **Lower:** **Upper:**

9.7. **Relative density:** 1.1 (water =1)

9.8. **Vapour density:**

9.9. **Solubility:** soluble in all purport

9.10. **Viscosity:**

9.11. **Others:**

10. Stability and reactivity:

10.1. **Conditions to avoid:** Visible light on the liquid, keep away from source of ignition (electric discharge and smoking etc.)

10.2. **Materials to avoid:** Strong oxidizing materials

10.3. **Hazardous decomposition products:** may occur peroxide

10.4.. **Others:**

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11. Toxicological information:

11.1. Acute Toxicity:	2HEMA	L D50 =	ORAL-RAT	5050 mg/kg
	2HEMA	L D50 =	ORAL-MUS	3275 mg/kg
11.1.1. Ingestion:				
11.1.2. Inhalation:				Of the Vapour may cause headache, dizziness and vomiting
11.1.3. Skin contact:				
11.1.4. Eye contact:				Repeated contact to the mucous membrane of eyes, nose and throat cause inflammation
11.2. Chronic effects:				
11.2.1.				
11.2.2.				
11.2.3.				
11.2.4.				
11.2.5.				

12. Ecological information:

Don't discard into the drain

13. Disposal considerations:

13.1. Material:	Disposal in accordance with federal, state and local regulations
13.2. Packaging:	

14. Transport information:

UN hazard Class 3
Pack group II EN 1090 (as Acetone)

15. Regulatory information:

16. Other information:

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N/D: No data

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